SIVKOV, I.I.

Chronic gastritis, gastric ulcer, and gastric polypi as precancerous
conditions. Terap. arkh. 26 no.6:23-33 N-D '54.   (MLRA 8:2)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. deystvitel'nyy chlen
AMN SSSR prof. V.N.Vinogradov) I Moskovskogo ordena Lenina meditsin-
skogo instituta.
            (STOMACH, neoplasms,
               polypi, malignant degen.)
            (POLYPI,
               stomach, malignant degen.)
            (PEPTIC ULCER, pathology,
               malignant degen. of stomach)
            (GASTRITIS, pathology,
               malignant degen.)
            (STOMACH, neoplasms,
               malignant degen. of gastritis, peptic ulcer & polypi)

SIVKOV, I.I.,kandidat meditsinskikh nauk; SARMINSKAYA, M.I.

Case of isolated gastric lymphogranulomatosis. Terap. arkh. 27 no.6:
69-71 '55.   (MIRA 9:2)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. deystvitel'nyy
chlen AMN SSSR prof. V.N. Vinogradov) i Moskovskogo ordena Lenina
meditsinskogo instituta.
          (HODGKIN'S DISEASE,
              stomach)
          (STOMACH, neoplasms,
              Hodgkin's dis.)

SIVKOV, I.I., kandidat meditsinskikh nauk

Diagnosis of gastric cancer. Terap.arkh.28 no.4:68-73 '56.
(MIRA 9:9)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir.-deystvitel'nyy chlen AMN SSSR prof. V.N.Vinogradov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(STOMACH, neoplasms
diag., gastroscopy with x-ray)
(CASTROSCOPY, in various dis.
cancer of stomach, with x-ray)

SIVKOV, I. I.

SIVKOV, I.I.; POPOV, V.G.; NEPORENT, M.I.; SMETNEV, A.S.; MURAV'YEV, M.V.;
YASTREBTSOVA, N.L.

Cardiac catheterization in acquired heart diseases. Terap.arkh.
29 no.3:37-51 Mr '57.   (MIRA 10:8)

1. Iz fakul'tetskoy terapevticheskoy kliniki (sir. - deystvitel'nyy
chlen AMN SSSR prof. V.N.Vinogradov) I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M.Sechenova
        (CATHETERIZATION, CARDIAC,
            in acquired heart dis. (Rus))

SIVKOV, I.I., kand.med.nauk

Triachanthin therapy in bronchial asthma and hypertension. Terap.
arkh. 20 no.7:83-85 Jl '58   (MIRA 11:8)

1. Iz kliniki fakul'tetskoy terapii (dir. - deystvitel'nyy chlen AMN
SSSR prof. V.N. Vinogradov) I-go Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M. Sechenova.
            (ASTHMA, therapy,
                trachanthin (Rus))
            (HYPERTENSION, therapy,
                same (Rus))
            (MUSCLE RELAXANTS, ther. use,
                trachanthin in asthma & hypertension (Rus))

SIVKOV, Ivan Ivanovich; VOLGAREVA, N.P., red.; BOGACHEVA, Z.I.

[Importance of gastroscopy in the diagnosis of stomach cancer]
Znachenie gastroskopii v diagnostike raka zheludka. Moskva, Gos.
izd-vo med.lit-ry. 1959.   105 p.   (MIRA 13:7)
        (STOMACH—CANCER)   (GASTROSCOPY)

VINOGRADOV, V.N.; Geroy Sotsialisticheskogo Truda, zasluzhennyy deyatel'
nauki, prof.; SIVKOV, I.I., kand.med.nauk

Indications for mitral commissurotomy. Terap.arkh. 31 no.4:3-17
Ap '59.   (MIRA 14:5)

1. Deystvitel'nyy chlen AMN SSSR (for Vinogradov).
              (MITRAL VALVE—SURGERY)

SMETNEV, A.S.; SIVKOV, I.I.

Gaseous composition of the blood obtained from the coronary sinus
during cardiac catheterization in patients with mitral stenosis.
Terap.arkh. 31 no.12:63-71 D '59.   (MIRA 13:4)

1. Iz kafedry fakul'tetskoy terapii (zav. - deystvitel'nyy chlen
AMN SSSR prof. V.N. Vinogradov) I Moskovskogo ordena Lenina medi-
tsinskogo instituta imeni I.M. Sechenova.
          (MITRAL STENOSIS diag.)
          (HEART CATHETERIZATION)

MAKOLKIN, V.I.; SIVKOV, I.I.; YASTREBTSOVA, N.L.

Relation of vectorcardiographic changes to pressure in the lesser circulation in patients with mitral defects of the heart. Terap. arkh. 32 no.10:14-22 '60.   (MIRA 14:1)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - deystvitel'-nyy chlen AMN SSSR prof. V.N. Vinogradov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
          (MITRAL VALVE—DISEASES) (VECTORCARDIOGRAPHY)
              (BLOOD PRESSURE)   (PULMONARY ARTERY)

NEPORENT, M. I.; SIVKOV, I. I.; YASTREBTSOVA, N. L.

Change in size of the left auricle in mitral stenosis. Terap.
arkh. no.7:16-22 '61.   (MIRA 15:2)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - deystvitel'-
nyy chlen AMN SSSR prof. V. N. Vinogradov) I Moskovskogo ordena
Lenina meditsinskogo instituta imeni I. M. Sechenova.

    (MITRAL VALVE--DISEASES)
    (HEART--HYPERTROPHY AND DILATATION)

SMETNEV, A.S.; SIVKOV, I.I.

Significance of the gas composition of the blood and minute volume
of the heart in the diagnosis of mitral stenosis. Vrach. delo.
no. 1:50-55 '61.   (MIRA 14:4)

1. Fakul'tetskaya terapevticheskaya klinika Pervogo moskovskogo
meditsinskogo instituta imeni I.M. Sechenova.
         (BLOOD, GASES IN) (MITRAL VALVE—DISEASES)

MASLYUK, V.I.; SIVKOV, I.I.; YASTREBTSOVA, N.L.

Systolic murmur in mitral vitium cordis. Kardiologiia 1 no.6:81-89
N-D '61.   (MIRA 15:1)

1. Iz kafedry fakul'tetskoy terapii (zav. - deystvitel'nyy chlen
AMN SSSR prof. V.N.Vinogradov) I Moskovskogo ordena Lenina meditsin-
skogo instituta imeni I.M.Sechenova.
              (MITRAL VALVE__DISEASES)   (HEART__SOUNDS)

SIVKOV, I.I.; YASTREBTSOVA, N.L.; MASLYUK, V.I.; NEPOMENT, M.I.

Evaluation of some functional tests in studying hemodynamic disorders of the lesser circulation in mitral stenosis. Vest. AMN SSSR 16 no.12: 55-65 '61.   (MIRA 15:2)

1. I Moskovskiy ordena Lenina meditsinskiy institut imeni I.M.Sechenova.
        (MITRAL VALVE—DISEASES) (PULMONARY CIRCULATION—DISEASES)

SIVKOV, I.I.; SPASSKAYA, V.A.

Commissurotomy in mitral stenosis in the presence of a rheumatic
process. Sov.med. 25 no.6:70-77 Je '61.   (MIRA 15:1)

1. Iz fakul'tetskoy terapevticheskoy kliniki I Moskovskogo ordena
Lenina meditsinskogo instituta imeni I.M.Sechenova (dir. - Geroy
Sotsialisticheskogo Truda deystvitel'nyy chlen AMN SSSR prof.
V.N.Vinogradov).
          (MITRAL VALVE__SURGERY)   (RHEUMATIC HEART DISEASE)

SIVKOV, I.I.; SMETNEV, A.S.; YASTREBTSOVA, N.L.

Some problems in the evaluation of blood flow in the lesser circulation in patients with mitral defects. Terap.arkh. 33 no.1:60-67 '61.

(MIRA 14:3)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - deystvitel'nyy chlen AMN SSSR prof. V.N. Vinogradov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
    (MITRAL VALVE --DISEASES)   (BLOOD--CIRCULATION)

MASLYUK, V.I.; SIVKOV, I.I.; MAYOROVA, L.A.; YASTREBTSOVA, N.L.; KULESHOVA, N.N.

Phonocardiographic changes before and after mitral commissu-
rotomy. Kardiologiia 5 no.2:59-69 '63   (MIRA 17:2)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir. - prof.
V.N.Vinogradov) i gospital'noy khirurgicheskoy kliniki (dir.
prof. B.V.Petrovskiy) I Moskovskogo ordena Lenina meditsin-
skogo instituta imeni I.M.Sechenova.

SIVKOV, K., inzh.

Successes achieved by selfless labor. Mor. flot 24 no.2:3-5
F '64.   (MIRA 18:12)

1. Tekhnicheskiy kabinet Baltiyskogo parokhodstva.

SIVKOV, K.

Following the course of communist labor. Mor.flot 25 no.1:3-5
Ja '65.
(MIRA 18:2)

1. Zaveduyushchiy tekhnicheskim kabinetom Baltiyskogo parokhodstva.

SIVKOV, K.

Let's give the green light to regular liner services. Mor. flot
25 no.5:15-17 My '65.

(MIRA 18:5)

1. Zaveduyushchiy tekhnicheskim kabinetom Baltiyskogo parokhodstva.

SIVKOV, K.

A zealous economy-minded crew. Mor. flot 25 no.10:3-5
O '65.   (MIRA 18:11)

1. Zaveduyushchiy tekhnicheskim kabinetom Baltiyskogo
parokhodstva.

SIVKOV, KH.

"Using Carbide Pulp in Construction", p. 3. "New Varnish for Patterns in the
Textile Industry", p. 3. (TEKHNICHESKO DELO, Vol. 5, no. 112, Oct. 1953,
Sofia, Bulgaria).

SO: Monthly List of East European Accessions, LC, Vol. 3, No. 4, April 1954.

MOCHALOV, Vasiliy Dmitriyevich,: SIVKOV, K.V.,prof., otv. red.; LANDA,
N.M., red. izd-va,; GUSEVA, I.N., tekhn. red.

[Peasant economy in Transcaucasia at the end of the 19th
century] Krest'ianskoe khoziaistvo v Zakavkaz'e k kontsu XIX v.
Moskva, Izd-vo Akad. nauk SSSR, 1958. 491 p.   (MIRA 11:11)
                    (Transcaucasia--Peasantry)

SIVKOV, K.V., doktor istor.nauk, otv.red.; DRUZHININ, N.M., akademik, red.; YATSUNSKIY, V.K., doktor istor.nauk, red.; ANFIMOV, A.M., kand. istor.nauk, red.; AVREKH, A.Ya., red.izd-va; ZELENKOVA, Ye.V., tekhn.red.

[Papers on the history of agriculture and the peasantry in the U.S.S.R.] Materialy po istorii sel'skogo khoziaistva i krest'ianstva SSSR; sbornik III. [Vol.3] Moskva, 1959. 494 p.   (MIRA 12:4)

1. Akademiya nauk SSSR. Institut istorii.
        (Agriculture)   (Peasantry)

SIVKOV, M.

    Line section of excellent quality. Sov.sviaz. 2 no.12:14 D '52.
                                         (MLRA 7:8)

1. Nachal'nik lineynobo uchastka Khilokskogo LTU, Chitinskoy ob-
lasti.
    (Telephone lines)

SIVKOV, M.N., inzh.-konstruktor

Apparatus used for testing cylinder bushings.   Rech. transp. 17
no.8:47 Ag '58.   (MIRA 11:10)

1. Krasnoyarskiy sudoremontnyy zavod.
        (Marine engines--Cylinders--Testing)

KOKOTKIN, Vasiliy Ivanovich; PODSYPANIN, Arkadiy Ivanovich;
    KHVOSTYANOV, D.D.; SIVKOV, M.V.; SKUL'SKIY, S.I.;
    USAN, A.M., red.; USTITANTS, V.A., red.

[Design and repair of calculating and punched card machines;
perforators, controllers, and sorting machines] Konstruktsiia
i remont schetno-perforatsionnykh mashin; perforatory, kont-
rol'niki i sortiroval'nye mashiny. Moskva, Gosstatizdat.
Pt.1. 1963. 166 p.   (MIRA 17:8)

L 01987-67   UR/ $\mathcal{2}$ $\mathcal{2}$

ACC NR: AM6004716   Monograph

Sivkov, Mikhail Vasil'yevich $B+/$

Electronic multiplying and computing attachments to T-5MU and T-5MV tabulators
(Elektronnaya umnozhayushchaya i vychislitel'naya pristavki k tabulatoru T-5MU
i T-5MV) Moscow, [Izd-vo "Statistika"] 1965. 62 p. illus., biblio., 6 charts
(in portfoilio) (At head of title: TsSU SSSR. Upravleniye podgotovki kadrov
schetnykh rabotnikov) 10,300 copies printed.

TOPIC TAGS: electronic multiplying attachment, binary decimal counter decade,
tabulator, switching circuit/ T 5MU tabulator, T 5MV tabulator

PURPOSE AND COVERAGE: This textbook is intended for students in educational
groups and schools of the Administration for the preparation of specialists for
the Central Statistical Administration of the USSR, which trains designers and
mechanics for tabulation stations, industrial plants and computer centers. It
may also be useful to students of other educational institutions in this field, as
well as to persons interested in studying the attachments for the T-5MU and
T-5MV tabulators. The book conforms to the curriculum for increasing de-
signer qualification with regard to modern equipment. In addition to the basic
methods of operation, the book describes the electronic attachments to the

Card 1/3

L 01987-67

ACC NR: AM6004716

Ch. II.   Electronic computing attachment for the T-5MV tabulator -- 42

SUB CODE: 09/ SUBM DATE: 26Mar65/ ORIG REF: 004/

fv

Card 3/3

SIVKOV, N. F.

J.I. & S.I. Vol. 151, 1945, p. 127-A

ALIMOV, A. N., LIPCHIN, N. N. AND SIVKOV, N. F.

"The Isothermal Treatment of Alloy Tool Steel". (Iron and Steel Institute, 1945, Translation Series, No. 208). A translation is presented of a paper which appeared in Katshestvennaia Stal, 1937, No. 2, pp. 37-40; this is an account of tests made on alloy steels for forging into tools with a view to reducing the time required for heat-treatment. The five steels used were: (1) A 12%-chromium steel; (2) a low-alloy chromium-nickel-molybdenum steel; (3) a 1-20% chromium 1-70%-tungsten steel; (4) an 8-40%-tungsten 2.53%-chromium 0-33%-vanadium steel; and (5) a 17-5%-tungsten 3-90%-chromium steel. Satisfactory heat-treatments were developed which involved holding at 860-900°C. for 1-1½ hr. followed by holding at a subcritical temperature for not more than 4 hr. The total heat-treatment time was reduced by about 60% as compared with the former methods.

L 15377-66   EWT(m)/EWP(e)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/HW

ACC NR: AP6004477   SOURCE CODE: UR/0048/66/030/001/0091/0092   59

AUTHOR: Kirenskiy, L.V.; Pyn'ko,V.G.; Sivkov,N.I.

ORG: Institute of Physics, Siberian Section of the Academy of Sciences, SSSR
(Institut fiziki Sibirskogo otdeleniya Akademii nauk SSSR); Krasnoyarsk State Peda-
gogical Institute (Krasnoyarskiy gosudarstvennyy pedagogicheskiy institut)

TITLE: Domain structure and switching of single-crystal nickel films /Transactions
of the Second All-Union Symposium on the Physics of Thin Ferromagnetic Films held at
Irkutsk 10 July to 15 July, 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya; v. 30, no. 1, 1966, 91-92

TOPIC TAGS: ferromagnetic film, magnetic thin film, nickel, magnetization, single
crystal, magnetic domain structure, epitaxial growing, sodium chloride

ABSTRACT: Nickel films from 200 to 1200 Å thick were deposited on NaCl substrates
at 120°C, the minimum temperature for epitaxy, and their domain structures and dynamics
were investigated. The (001) planes and [100] axes of the epitaxial films were
parallel to the (001) planes and [100] axes, respectively, of the substrates. The
easy axis in the plane of the film was in or close to the [110] direction. Epitaxial
nickel films deposited on NaCl at higher temperatures usually have a fine mottled
domain structure and switch by nonuniform rotation. The domain structure of the
"cold" films and their switching behavior varied with the thickness. The domains of

Card   1/2

2

L 15377-66

ACC NR: AP6004477

the films thicker than 500 Å exhibited substructure and the walls evinced a complex internal structure. Domain formation took place over the full area of the film and switching was accomplished by domain destruction without significant wall movement. These films were characterized by inclined hysteresis loops. This behavior is as-cribed to inclination of the easy axis to the plane of the film, owing to the absence in that plane of a [111] axis. The easy axis of a film from 300 to 500 Å thick lay in the plane of the film in the [110] direction. These films were rather uniform and amplitude dispersion of the anisotropy was not detected. The domains were large and domain wall movement played a significant role in the switching process. Switching of films less than 300 Å thick began with the appearance of substructure owing to the nonuniform rotation of the magnetization. The behavior of these films is ascribed to amplitude dispersion of the anisotropy due to nonuniform thickness of the film. Orig. art. has: 4 figures.

SUB CODE: 20   SUBM DATE: 00   ORIG. REF: 000   OTH REF: 000

Card 2/2

AUTHOR: Komalskiy, L.V.; Sukhanova, R.V.; Kan, S.V.; Pyn'ko, V.G.; Sivkov, N. I.

ORG: Institute of Physics, Siberian Section, Academy of Sciences, SSSR (Institut fiz-iki sibirskogo otdeleniya Akademii nauk SSSR); Krasnoyarsk Pedagogic Institute (Krasnoyarskiy pedagogicheskiy institut)

TITLE: Fine magnetic structure of the domains in iron-nickel films /Report, All-Union Conference on the Physics of Ferro- and Antiferromagnetism held 2-7 July 1965 in Sverdlovsk/

TOPIC TAGS: permalloy, magnetic thin film, magnetic structure, magnetic domain struc-ture, metal film

ABSTRACT: The authors have employed an electron microscope to investigate the fine magnetic structure of the domains (magnetization ripples) in films of nickel-iron alloy vacuum deposited at 10^{-4} mm Hg onto rock salt substrates. A series of films containing 80% Ni (in the initial mix) were deposited on substrates maintained during deposition at different temperatures between 50 and 200° C, and a second series of films containing from 40 to 90% Ni were deposited on substrates maintained at 100° C. Fine magnetic structure and magnetization ripples were observed in both series of films. In the 80% Ni film deposited at 160° the crystallite size was 590 Å, the wavelength of

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L 05700-07

ACC NR: AP6029127

the magnetization ripples was 1.25 micron, and the angular amplitude of the magnetiza-tion oscillations was 8.5°. With increasing substrate temperature during deposition, both crystallite size and the magnetization ripple wavelength increased, the latter reaching 2.5 micron at a substrate temperature of 200°. The films deposited on 100° substrates all showed fine magnetic structure and magnetization ripples. Even the film containing 70% Ni, whose crystal anisotropy should be zero, had ripples; this is ascribed to composition fluctuations giving rise to regions of local crystal anisotro-py. The magnetization ripple wavelength in this series of films was strongly correla-ted with the coercive force, both passing through a minimum at the same composition (80% Ni). A single-crystal film (80% Ni) was also investigated. This film had bi-axial magnetic anisotropy and also exhibited magnetization ripples with a wavelength of 1.25 micron. The magnetization ripples in the single-crystal film were found significantly to affect the process of quasistatic magnetization switching in it.
Orig. art. has: 2 figures and 1 table.

SUB CODE: 20/   SUBM DATE: 00/   ORIG REF: 000/ ·   OTH REF: 007

c -   2/2 bc

L 09128-67   EWT(m)/EWP(t)/ETI   IJP(c)   JD/HW

ACC NR: AP6032617   SOURCE CODE: UR/0126/66/022/003/0380/0391   47

AUTHOR: Kirenskiy, L. V.; Pyn'ko, V. G.; Sukhanova, R. V.; Sivkov, N. I.; Pyn'ko, G. P.; Edel'man, I. S.; Komalov, A. S.; Kan, S. V.; Syrova, N. I.; Zvegintsev, A. G.

ORG: Institute of Physics SO AN SSSR (Institut fiziki SO AN SSSR); Krasnoyarsk Pedagogical Institute (Krasnoyarskiy pedinstitut)

TITLE: Epitaxial films of iron, nickel and cobalt [report presented at the Conference on Physics of Ferro- and Antiferromagnetism, Sverdlovsk, 5-7 July 1965]

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 3, 1966, 380-391

TOPIC TAGS: magnetic anisotropy, epitaxial growing, hysteresis loop, metal film

ABSTRACT: The authors study the epitaxial growth of iron, nickel and cobalt films thermally vaporized onto ionic crystals split in air and in a vacuum. It is shown that when the substrates are heated in a vacuum of 10^{-4} mm Hg, the surface state is changed with a favorable effect on epitaxy. The phase composition of the film may be controlled by proper selection of the substrate. The fields of anisotropy of the films are measured and the effect which application of a magnetic field during vaporization has on the magnetic anisotropy of the films is studied. The domain structure of the films and its dynamics are analyzed and the results are used as a basis for explaining the shape of hysteresis loops. The coercive force is measured in films of various thickness. It is shown that the coercive force of the films is always much less than the field of anisotropy and is approximately inversely proportional to the saturation magnetization. Orig. art. has: 13 figures, 1 table, 5 formulas.

SUB CODE: 11, 20/ SUBM DATE: 30Jul65/ ORIG REF: 004/ OTH REF: 007

Card 1/1 nst   UDC: 539.216.25:538.221

L 36341-66   EWT(m)/T/EWP(t)/ETI   IJP(c)   JD

ACC NR: APG015777   (A,N)   SOURCE CODE: UR/0048/66/030/005/0832/0834

AUTHOR: Sivkov, N. I.; Prokopenko, V.S.; Pyn'ko, V. G.

ORG: Krasnoyarsk Pedagogical Institute (Krasnoyarskiy pedagogicheskiy institut);
Institute of Physics, Siberian Section, Academy of Sciences of the SSSR (Institut
fiziki Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Concerning magnetization reversal in single crystal iron films /Report,
Fifth All-Union Conference on Electron Microscopy held in Sumy 6-8 July 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 5, 1966, 832-834

TOPIC TAGS: electron microscopy, magnetic domain structure, ferromagnetic film, iron

ABSTRACT: Two series of electron micrographs are presented showing variations of the
domain structure of an iron film during magnetization reversal. The 800 Å thick film
was evaporated at 10^{-4} mm Hg onto a freshly cleaved NaCl surface heated to 150-200° C.
The film had two equivalent easy axes. In such a film magnetization reversal along
an easy axis takes place by nucleation and growth of spike domains with 90° walls fol-
lowed by appearance of a region of reversed magnetization, which grows by motion of
the 180° walls. One series of electron micrographs shows the appearance of "steps" at
the tip of a spike during the early stage of this process. The second series of elec-

Card 1/2

L 36341-66

ACC NR: AP6015777

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tron micrographs shows passage of a 180° domain wall past an inhomogeneity in the film with the temporary formation of a triangular domain with 90° walls. These phe-nomena are discussed briefly. Orig. art. has: 3 figures.

SUB CODE: 20/   SUBM DATE: 00/   ORIG REF: 000/   OTH REF: 001

Card 2/2

BONDAREV, V.I.; SIVKOV, N.R.

Optimum angles of slope of seismic detectors in azimuthal
setups. Izv. AN SSSR. Ser. geofiz. no.8:1192-1194 Ag '64
(MIRA 17:8)

1. Sverdlovskiy gornyy institut im. V.V.Vakhrusheva.

SIVKOV, P.

        Our complaints to machinery designers. Mashinostroitel' no.7:9 Jl '62.
                                          (MIRA 15:7)

             (Machinery—Design)

SIVKOV, S. I.

Sivkov, S. I. - "Changes in turbidity as a result of the flowing together of
water particles suspended in air", Trudy Glav. geofiz. observatorii, Issue
14, 1949, p. 21-25, - biblio: 7 items

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

SIVKOV, S. I.

Sivkov, S. I. - "On the problem of determining the supply of water in the atmosphere", Trudy Glav. geofiz. observatorii, Issue 14, 1949, p. 26-34, - Bibliog: 13 items

SO: L-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

SIVKOV, S. I.

Sivkov, S. I. - "Comparison and criticism of various methods of reducing coefficients of atmospheric transparency to a single mass", Trudy Glav. geofiz. observatorii, Issue 14, 1949, p. 35-51, - biblio: 13 items.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

SIVKOV, S. I.

Sivkov, S. I. - "A general method for reducing the intensivity of solar radiation to a determined number of atmospheric masses", Trudy Glav. geofiz. observatorii, Issue 14, 1949, p. 52-62.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

CA

Utilization of solar radiation in photosynthesis by marine diatoms. I. A. Linskaya and S. I. Sivkov. *Doklady Akad. Nauk S.S.S.R.* **67**, 1147-50(1949). Although appreciable variations were found in some specimens of diatoms, irradiation (sunlight) of cultures in sterilized sea water gave the following percentage utilization of solar energy: *Coscinodiscus granii* 3%, *C. excentricus* 6, *C.* spp. 7, *Ditylium brightwelli* 6-14, and *Rhizosolenia calcaravis* 3%.
                                                    G. M. Kosolapoff

ASTAPOVICH, I.S.; BRONSHTEN, V.A.; BUGOSLAVSKAYA, Ye.Ya.;
BUGOSLAVSKAYA, N.Ya; VSEKHSVYATSKIY, S.K.; MIKHAYLOV, A.A.;
SIVKOV, S.I.; TER-OGANEZOV, V.T.; RAKHLIN, I.Ye., red.;
NEGRIMOVSKAYA, R.A., tekhn. red.

[Solar eclipse of February 25, 1952, and its observation] Sol-
nechnoe zatmenie 25 fevralia 1952 g. i ego nabliudenie. Sost.
I.S.Astapovich i dr. Pod red. A.A.Mikhailova. Moskva, Gos.
izd-vo tekhniko-teoret. lit-ry, 1951. 175 p.   (MIRA 15:4)

1. Vsesoyuznoye astronomo-geodezicheskoye obshchestvo. 2. Chlen-
korrespondent Akademii nauk SSSR (for Mikhaylov).
          (Eclipses, Solar--1952)

USSR/Geophysics - Atmosphere, Trans-   1 Oct. 51
    parency of

"Effective Coefficient of Transparency of the Atmos-
phere," S. I. Sivkov, Karadag Actinometric Obs

"Dok Ak Nauk SSSR" Vol LXXX, No 4, pp 599-601

One of the most important characteristics of radi-
ational climate is the sum of solar radiation in-
cident upon 1 sq cm of horizontal surface in the
course of a cloudless day. At the present time
there is no simple and convenient method for find-
ing the value of the effective coeff of transparency

222T43

from observations. Gives a table of Peff for var-
ious months of the year. Submitted 18 Jul 51 by
Acad V. V. Shuleykin.

SIVKOV, S. I.

Meteorological Abst.
Vol. 4 No. 6
June 1953
Radiation and
Temperature

551.521.14

4.6–121

Sivkov, S. I. Geograficheskoe raspredelenie effektivnykh velichin al'bedo vodnoi pov-erkhnosti. [Geographical distribution of the effective magnitudes of the albedo of water surfaces.] *Vsesoiuznoe Geograficheskoe Obshchestvo, Izvestiia*, 84(2):200–201, March/April 1952. table, 2 refs. DLC—In order to calculate the effective albedo which would give not instantaneous values but daily totals of the relationship between indirect and reflected radiation over a water surface, P. P. Kuz'min proposed to consider the albedo of water surfaces as a function of the height of the sun at true noon. A table giving the annual course of the effective albedo (in percentage) of a water surface for all latitudes from 0 to 90° in 5° class intervals is presented. Equations for calculating radiation balance with the aid of this albedo are $\Sigma S_r' = A_r \cdot \Sigma S_o'$ and $\Sigma S_o' = (1 - A_r) \cdot \Sigma S_o'$ where S_r' is monthly total of reflection from water, $\Sigma S_o'$ is total monthly incident radiation, $\Sigma S_o'$ is radiation absorbed by water surface, A_r—albedo. *Subject Heading:* 1. Albedo of water surfaces.—I.L.D.

SIVKOV, S. I.

BRONSHTEN, V.A.; BUGOSLAVSKAYA, Ye.Ya; BUGOSLAVSKAYA, N.Ya; VSEKHSVYATSKIY, S.K.; DAGAYEV, M.M.; LEPSKIY, M.M.; SIVKOV, S.I.; TER-OGANEZOV, V.T. MIKHAYLOV, A.A., redaktor; RAKHLIN, I.Ye., redaktor; TUMARKINA, N.A., tekhnicheskiy redaktor

[Solar eclipses and observations on the solar eclipse of June 30, 1954] Solnechnye zatmeniia i ikh nabliudenie; k solnechnomu zatmeniiu 30 iiunia 1954 g. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1954. 223 p. (MLRA 7:10)

1. Chlen=korrespondent AN SSSR (for Mikhaylov)
    (Eclipses, Solar)

SIVKOV, S. J

PHASE I BOOK EXPLOITATION   SOV/5031

Mikhaylov, A. A., ed., Corresponding Member, Academy of Sciences USSR

Solnechnyye zatmeniya i ikh nablyudeniya (Observations of Solar Eclipses) Moscow, Fizmatgiz, 1960. 238 p. 12,000 copies printed.

Compilers: (title page): V. A. Bronshten, Ye. Ya. Bugoslavskaya, N. Ya. Bugoslavskaya, S. K. Vsekhsvyatskiy, M. M. Dagayev, M. M. Lepskiy, A. A. Mikhaylov, S. I. Sivkov and V. T. Ter-Oganezov.

Sponsoring Agency: Vsesoyuznoye astronomo-geodezicheskoye obshchestvo.

Ed.: I. Ye. Rakhlin; Tech. Ed.: M. Ya. Murashova.

PURPOSE: This book is intended for student and amateur astronomers.

COVERAGE: This collection of articles on solar eclipse phenomena has been published to aid amateur astronomers in the observation of the eclipse of February 15, 1961. Individual articles dis- cuss the mechanics of solar eclipses, photographic and photo- metric investigations of the corona, brightness distribution,

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SOV/5031

Observations of Solar Eclipses

atmospheric optics, and actinometric and meteorological obser- vations. A map showing the track of the total eclipse of Feb- ruary 15, 1961 is included and explained. No personalities are mentioned. There are 74 references, all Soviet.

TABLE OF CONTENTS:

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Observations of Solar Eclipses   SOV/5031

AVAILABLE: Library of Congress

Card ~~37~~

JA/dwm/ec
4-28-61

S/169/62/000/004/022/103
D228/D302

AUTHOR: Sivkov, S. L.

TITLE: The object and the tasks of actinoclimatology

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 4, 1962, 13-14,
               abstract 4B105 (V sb. Aktinometriya i atmosfern. opti-
               ka, L., Gidrometeoizdat, 1961, 16-17)

TEXT: The many data of world-wide actinometric observations need
to be systematized and processed from the climatologic viewpoint.
For this purpose all climatologic investigations of the radiation
regime should be separated into a special actinoclimatologic sec-
tion which will study the radiation climates of the whole world
and develop new processing methods. The present state of actino-
climatology is characterized by the irregularity of the materials
(in consequence of the highly diverse methods of observation that
have been applied), by the discrepancy and the disagreement of a
number of observations, and by the unequal study of the radiation
regime's elements. There are especially few data on long-wave ra-

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S/169/62/000/004/022/103
D228/D302

The object and the ...

diation and the radiation balance. The task of actinoclimatology
is to develop and introduce new standard apparatus, and to use
automated devices in the investigations and simpler, cheaper in-
struments on the station networks. /¯Abstracter's note: Complete
translation._/

Card 2/2

S/169/62/000/007/097/149
D228/D307

Quantitative characteristic of ...

bidity depolarization D_r. When the intensity of polarized light, scattered by aerosol particles, is low in comparison with that of polarized light, scattered by molecules of the air, $D_r = 1 - (P_r/P_i)$; here P_r is the degree of polarization measured in the real atmosphere, and P_i is the degree of polarization which, other things remaining unchanged, would be observed in the Rayleigh atmosphere at the same point in the sky (the values of P_i are calculated from Tikhanovskiy's theory for a wavelength of 530 mμ). D_T, which did not appear to depend on the sun's elevation when the specific values of the integral albedo are close to the universal for landscapes of the type under consideration, was calculated from the data of measurements of the degree of polarization in integral light at the point of maximum polarization (in the sun's vertical at a distance of 90° from the sun). It follows from this that the ratio of the polarizability for two elevations of the sun is identical for ideal and real atmospheres and is a function of the albedo.

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Quantitative characteristic of ...

S/169/62/000/007/097/149
D228/D307

Having computed this function, it is possible to determine from polarimetric measurements the albedo of large sections of the ground surface. The polarization's diurnal variation is readily calculated from a small number of observations, and it becomes possible to reduce the polarization measurement to a definite elevation of the sun at any time. When comparing the data of polarimetric and actinometric measurements D_T was found to be a parameter, highly sensitive to atmospheric turbidity. It also allows the contribution, introduced into the total turbidity factor by the humid turbidity factor and by the dust- and condensation-humidity factor, to be ascertained. When conducting polarization measurements in different spectral sections D_T can be determined for each section separately. In this case the correlation of the values of D_T in different spectral sections must depend on the nature of the scattering particles and on their size distribution. Since D_T ensures that the results of polarization measurements made at different times and points are comparable, and since it can be applied to analyze the state of

Card 3/4

LEBEDEVA, K.D.; SIVKOV, S.I.

Measurement accuracy of radiation balance by thermoelectric
balance meters. Trudy GGO no.129:3-30 '62.   (MIRA 16:2)
              (Solar radiation) (Meteorological instruments)

LEBEDEVA, K.D.; SIVKOV, S.I.

Making allowance for the temperature dependence of the conversion factors of actinometric instruments. Trudy GGO no. 112:116-127 '63. (MIRA 17:5)

SIVKOV, S. I.

"The development of methods of indirect computation of radiation character-
istics in the USSR."

report presented at the Atmospheric Radiation Symp, Leningrad, 5-12 Aug 64.

ACCESSION NR: AT4044399 : S/2531/64/000/160/0003/0019

AUTHOR: Sivkov, S. I.

TITLE: Method for computing possible radiation totals

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy*, no. 160, 1964. Metodika meteorologicheskikh nablyudeniy i obrabotki (Methods of meteorological observation and processing observation data), 3-19

TOPIC TAGS: meteorology, direct solar radiation, scattered solar radiation, total solar radiation, insolation, radiometry

ABSTRACT: Total radiation is usually represented in the form

$$\sum W = \sum W_0 f(n) \qquad (1)$$

where $\sum W_0$ denotes the possible radiation total and $f(n)$ is a function of some characteristic n of the cloud cover, used as the basis for computations. Errors in determination of possible total radiation will distort the computed actual sums when there are few clouds and when the value of the function $f(n)$ approaches unity. If the value $\sum W_0$ is obtained only approximately, the constant parameters of the function $f(n)$ will be determined inexactly from the relation $f(n) = \dfrac{\sum W}{\sum W_0}$

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ACCESSION NR: AT4044399

and the accuracy obtained using formula (1) can be lowered. Determination of
actual possible radiation totals is possible by empirical methods or by computa-
tions. Empirical methods are precise but time-consuming and are seldom used ex-
cept for long series of observations at a few stations. Until now, however, com-
putation methods have been developed only for determination of possible sums of
direct solar radiation on a horizontal surface and the sums of total radiation,
despite the fact that the sums of any form of radiation can be required for prac-
tical purposes. In this paper the author presents new methods for computing pos-
sible sums of direct solar, scattered and total radiation using data on latitude,
solar declination and the midday intensity of direct radiation. For the most part
the computations are based on the V. G. Kastrov formula (Meteorologicheskiy vest-,
nik, No. 7, 1928). The paper is divided into four parts. 1. Possible sums of
direct solar radiation on a perpendicular surface; 2. Possible sums of direct
solar radiation on a horizontal surface; 3. Computation of possible sums of
scattered radiation; 4. Computation of the possible sums of total radiation.
The required formulas and several nomograms are presented. Orig. art. has: 54
formulas, 3 figures and 1 table.

ASSOCIATION: Glavnaya geofizicheskaya observatoriya, Leningrad (Main Geophysical
Observatory)

Card   2/3

ACCESSION NR: AT4044399

SUBMITTED: 00

SUB CODE: ES

NO REF SOV: 016

ENCL: 00

OTHER: 004

Card   3/3

LEBEDEVA, K.D.; SIVKOV, S.I.; YASTREBOVA, T.K.

More accurate measurements of the radiation balance by actinometric
stations. Trudy GGO no.160:20-31   '64.   (MIRA 17:9)

S/2531/64/000/160/0032/0038

ACCESSION NR: AT4044400

AUTHOR: Sivkov, S. I.

TITLE: Computation of possible and relative duration of sunshine

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy*, no. 160, 1964. Metodika meteorologicheskikh nablyudeniy i obrabotki (Methods of meteorological observation and processing observation data), 32-38

TOPIC TAGS: meteorology, sunshine, sunshine duration, heliometer

ABSTRACT: The problem of computing the possible and relative duration of sunshine requires clarification because there are three different ways to determine these values:
1. The possible duration of sunshine is determined as the interval between astronomical sunrise and astronomical sunset, is therefore dependent only on the latitude of the place and solar declination and is identical for all points at the same latitude at a particular time; 2. The possible duration of sunshine is the time between actual sunrise and actual sunset in the absence of clouds, and is therefore dependent not only on latitude and solar declination, but also on the openness of the horizon at the points of sunrise and sunset; 3. The possible duration of sunshine is determined as the interval of time

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ACCESSION NR: AT4044400

between the beginning and end of recording of a heliograph in the absence of clouds over the solar disk during the entire day. The deficiencies of all three methods are discussed. It is simplest to compute sunshine by the first method, but it is far more correct to use method 3, i.e., for a particular place and a particular heliograph. Method 3 was used in the SSSR until 1955 and method 1 subsequent to that date. Soviet data on relative duration of sunshine before and after 1955 therefore cannot be compared. It is noted that if the SSSR is to conform to the recommendations of the World Meteorological Organization on this subject it would be necessary to return to the method of computation of these values used prior to 1955. The reason for the change in 1955 was the complexity of computations; in this article, the author presents a simpler graphic method for determination of the necessary values. Examples of such simplified computations are given. The proposed method is superior to that currently in use because the results are represented in graphic form for the entire year, the results can be checked easily and the results of determinations for several years can be plotted on one graph, making it possible to detect changes in the openness of the horizon or change in the apparatus. Orig. art. has: 4 formulas, 1 figure and 1 table.

Card 2/3

L 54814-65   EWT(l)/EWG(v)   Pe-5/Pae-2   GW

ACCESSION NR: AT5016795   UR/2531/65/000/169/0066/0075

AUTHOR: Sivkov, S. I.

TITLE: Dilution of solar radiation in an ideal atmosphere

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 169, 1965. Voprosy atmosfernoy optiki i aktinometrii (Problems in atmospheric optics and actinometry), 66-75

TOPIC TAGS: radiation dilution, radiation intensity, ideal atmosphere, molecular dispersion, selective absorption, solar constant, solar photosphere

ABSTRACT: The dilution of direct solar radiation in an ideal atmosphere which does not contain water vapor, dust, or condensation products is investigated theoretically. The dilution is caused by molecular dispersion and selective absorption by ozone and fundamental atmospheric gases. A formula is given for computing the radiation intensity from the solar constant and the transparency coefficients of ozone and air. Atmospheric coefficients are computed under the

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L 54814-65
ACCESSION NR: AT5016795

atmospheric conditions when the temperature of the air is equal to 0C and the pressure is 1000 mb. The radiation of the solar photosphere differs from that of a black body at any temperature. The intensity of solar light in an ideal atmosphere was computed for optical masses 1, 2, 3, 4, 5, 6, 8, and 10, taking into consideration intervals of spectral range and totaling them. Numerical values are given in a table in the original article. Orig. art. has: 2 figures, 2 tables, and 8 formulas.
[EG]

ASSOCIATION: Glavnaya geofizicheskaya observatoriya (Main Geophysical Observatory)

SUBMITTED: 00   ENCL: 00   SUB CODE: AA

NO REF SOV: 007   OTHER: 022   ATD PRESS: 4029

Card 2/2

L 14180-66   EWT(1)   GW

ACC NR: AT6004191

SOURCE CODE: UR/2531/65/000/174/0062/0080

AUTHOR: Lebedeva, K. D.; Sivkov, S. I.; Yastrebova, T. K.

ORG: Main Geophysical Observatory, Leningrad (Glavnaya geofizicheskaya observatoriya)

TITLE: Data from an investigation of thermoelectric radiation balance meters designed by Yu. D. Yanishevskiy

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 174, 1965. Metodika meteorologicheskikh nablyudeniy i obrabotki (Methods of meteorological observation and processing observation data), 62-80

TOPIC TAGS: radiation balance, actinometry, radiation receiver

ABSTRACT: A number of thermoelectric radiation balance meters designed by Yu. D. Yanishevskiy were tested in 1961-1963 at the Main Geophysical Observatory. The purpose of the investigation was to find systematic errors in meters of this type, to determine the effect of these errors on the accuracy of measurements of the radiation balance and to find ways to reduce these errors to a minimum. In this paper,

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L 14180-66

ACC NR: AT6004191   O

the authors analyze the data resulting from this study. The sensitivity of the in-
strument to short wave and long wave radiation is considered as well as the effect
of differences in sensitivity on the result of measurements of the radiation balance.
The differences in the sensitivity of the upper and lower sides of this type of ra-
diation balance instrument are discussed. Recommendations are made for improving
the accuracy of the meters. A coating with a minimum selectivity (Parsons lacquer)
should be used for blacking. When the meters are checked at the central weather bu-
reau, the sensitivity of the thermopiles to short wave and long wave radiation should
be checked individually and so indicated on the verification certificate. The veri-
fication certificates for the meters should also show the sensitivity of each side
separately. The correction factor which depends on the height of the sun should al-
so be checked at the central weather bureau and indicated on the verification cer-
tificates for each side individually. In using the meters, observation should be
taken on both sides and the average of these readings should be used for calcula-
tions. When taking readings, the maximum and minimum deflections of the galvanome-
ter needle should be observed for a period of no less than one minute. The average
of the maximum and minimum readings should be used for the radiation balance reading.
In analyzing the data, scale corrections of less than one-half a division in galva-
nometer readings should not be taken into account. Orig. art. has: 7 figures, 5
tables, 16 formulas.
SUB CODE: 08/ SUBM DATE: 00/ ORIG REF: 006/ OTH REF: 002
Card 2/2

L 14223-66   EWT(1)   GW   SOURCE CODE: UR/2531/65/000/174/0101/0105
ACC NR: AT6004192 .

AUTHOR: Sivkov, S. I.

ORG: Main Geophysical Observatory, Leningrad (Glavnaya geofizicheskaya observatori-
ya)

TITLE: Calculating the effect of temperature for thermoelectric actinometers for
the case where the temperatures of the receiver and galvanometer differ

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 174, 1965.
Metodika meteorologicheskikh nablyudeniy i obrabotki (Methods of meteorological ob-
servation and processing observation data), 101-105

TOPIC TAGS: actinometry, radiation balance, radiation receiver

ABSTRACT: An improved method is proposed for calculating temperature corrections
for thermoelectric actinometers where the temperature of the radiation receiver and
galvanometer differ. Formulas are derived showing the relative change in the con-
version factor in percent. These formulas show what changes should be made in the
recommended methods for determining temperature corrections when there is a consid-
erable difference in the temperatures of the receiver and galvanometer. A table is

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L 14223-66

ACC NR: AT6004192

given for finding the temperature in degrees as a function of the temperature of re-
ceiver and galvanometer. If the temperature conditions for the radiation receiver
and the galvanometer differ, the ambient temperature is taken as that of the receiv-
er. Use of the proposed method will increase the accuracy of radiation balance
measurements in Arctic and Antarctic conditions. Orig. art. has: 1 table, 8 formu-
las.

SUB CODE: 08/ SUBM DATE: 00/ ORIG REF: 003/ OTH REF: 000

Card 2/2

LEBEDEVA, K.D.; SIVKOV, S.I.; YASTREBOVA, T.K.

Results of studying the IU.D. IAnishevskii thermoelectric
actinometer. Trudy GGO no.174:62-80 '65.   (MIRA 19:1)

I. 08299-67   EWT(1)   GW
ACC NR: AT6031969   (N)   SOURCE CODE: UR/3199/66/000/015/0021/0030

AUTHOR: Lebedeva, K. D.; Sivkov, S. I.; Yastrebova, T. K.

27
26
B+1

ORG: none

TITLE: Short-period fluctuations in the readings of an unshielded balancemeter and pyrgeometer

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. Meteorologicheskiye issledovaniya, no. 15, 1966, 21-30

TOPIC TAGS: radiometer, balancemeter, short period fluctuation, lag time, net radiation measurement, pyrgeometer, METEOROLOGIC INSTRUMENT

ABSTRACT: The present study analyzes the short-period fluctuations in the readings of the unshielded balancemeter and pyrgeometer. Radiometers with sensitive surfaces without ventilation or transparent cups such as Yanishevsk's thermoelectric balancemeter used in the USSR, are greatly influenced by rapid changed in wind velocity and air temperature. Thus, the readings of such instruments fluctuate continually under natural conditions with periods of about 5—20 sec and amplitudes which depend on the lag-time of the instrument. These short-period reading fluctuations are not connected with the real variation of observed values and must be eliminated form the observation results.

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L 08299-67

This can be done by shielding sensitive surfaces with polyethylene films or by ventilation. Other ways are increasing the lag-time of instrument to an optimal value and improvement of the reading system. The lag-time increase from 10—15 sec to about 60 sec causes about a tenfold decrease of the short-period fluctuation amplitudes. At the same time the lag-time remains sufficiently little as the instrument is capable of responding to slower variations of the observed values with periods of 1 min or more. When observations are made with unmodified instruments, the fluctuations may also be eliminated by taking maximal and minimal readings of the index during a time interval of not less than 60 sec. The average of these two readings will be close to the mean value of the measured net radiation intensity (error of less than 5% in 92.5 cases). The possibility of eliminating the influence of the short-period fluctuations shows that unshielded and unventilated radiometers can be considered as suitable instruments for measuring net radiation. Orig. art. has: 4 figures.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 014/ OTH REF: 002/

Card 2/2 nst

L 10452-67 EWT(m)/EWP(t)/ETI IJP(c) JD/DJ
ACC NR: AP6022507   SOURCE CODE: UR/0133/66/000/004/0327/0328

AUTHORS: Oyks, G. N.; Matevosyan, P. A.; Ansheles, I. I.; Fatkullin, O. Kh.;
Selivanov, V. N.; Petrov, B. S.; Sivkov, S. S.; Fedorov, V. I.

ORG: none

TITLE: Experimental smelting of ball-bearing steel by using a refusing method
employing a new technology

SOURCE: Stal', no. 4, 1966, 327-328

TOPIC TAGS: alloy steel, ball bearing steel, metallurgic research / ShKh15 alloy
steel

ABSTRACT: A new technology for smelting ball-bearing steel employing a refusing
method was developed. This method is based on the results of an earlier investigation
by G. N. Oyks, P. A. Matevosyan, I. I. Ansheles, i dr. (Novaya tekhnologiya vyplavki
sharikopodshipnikovoy stali, Metallurgizdat, 1962). The salient points of the new
technology are: 1) the furnace charge consists of 100% ball-bearing steel scrap; 2) to
insure desulfonation, the slag is reduced with pulverized coke only; 3) the oxygen
concentration is maintained by additions of red hot bauxite. After the above three
steps, the steel is evacuated and poured in the usual way. A comparison of the new
method with older ones is presented (see Fig. 1). It is concluded that the new method
yields ball-bearing steel of higher quality.

UDC: 669.187.2

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L 10452-67

ACC NR: AP6022507

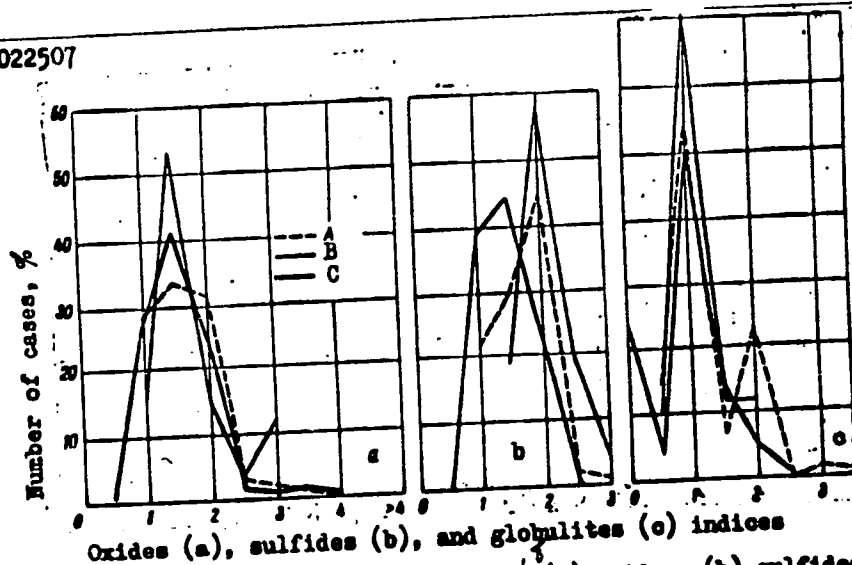Oxides (a), sulfides (b), and globulites (c) indices

Fig. 1. Comparison of impurities in steel ShKh15: (a) oxides, (b) sulfides, and (c) globulites obtained by evacuation under usual slags (A) and slags of increased oxidative power (B — smelting with oxidation agent, C — smelting according to the new refusing method).

Orig. art. has: 2 tables and 2 graphs.

Card 2/2 ⁶ᵖ   SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 001

ASD(m)-3/AS(mp)-2

L 21136-65   EPA(s)-2/EnT(m)/EnP(b)/T/EnA(d)/EnP(e)/EnP(t)

WH/JD   S/0133/64/000/009/0805/0808

ACCESSION NR: AP4045655

AUTHOR: Oyks, G. N.; Matevosyan, P. A.; Ansheles, I. I.; Fatkullin, O. Kh.; Selivanov, V. M.; Shury*gin, G. D.; Sivkov, S. S.; Fedan, A. T.

TITLE: Results of vacuum casting ball-bearing steel by different methods

SOURCE: Stal', no. 9, 1964, 805-808

TOPIC TAGS: vacuum casting, ball bearing steel, degassing alumina rich brick lining

ABSTRACT: A new method involving vacuum casting by gas circulation was developed by the authors in collaboration with B. S. Petrov, M. N. Kul'kova, Ye. N. Ponomarev, Yu. I. Ponomareva, R. M. Zimina, V. I. Fedorov and K. V. Belyakov. The new production process was compared to the method employed at Krasnyy Oktyabr' Plant comprising vacuum casting in the ladle which was found to be ineffective in the treatment of 20 to 30 ton charges. Therefore, the plant metallurgists tried out degassing of the steel in the jet as well as circulation vacuum casting. The specimens were adequately degassed with the

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L 21136-65
ACCESSION NR: AP4045655

steel giving up gas at a rate of 200 to 300 1/min. Hydrogen contents decreased from 43 to 54%. In the process of vacuum casting steel in the ladle, the specimens displayed greater amounts of oxide and sulfide inclusions than in circulation vacuum casting or vacuum casting during reladling. The greatest number of globular inclusion was identified in specimens produced by vacuum casting in the ladle. The appearance of this defect is attributed to the increased contact of lightweight melts with chamotte refractories. The authors give preference to circulation vacuum casting despite globule formation and suggest that the use of alumina-rich brick for the lining of the vacuum chamber through which argon is blown and for the sleeve coil lining would substantially improve this process. However, it still remains to be tested on a mass production scale and with heavy weight melts. Orig. art. has: 3 figures and 2 tables

ASSOCIATION: None
SUBMITTED: 00   ENCL: 00   SUB CODE: MM
NR REF SOV: 003   OTHER: 002

Card   2/2

FATKULLIN, O.KH.; CHUKHLOV, V.I.; OYKS, G.N.; AMSHELES, L.L.; SIVKOV, S.S.;
    FEDAN, A.T.; FEDOROV, V.I.; DANILIN, V.I.

    Deoxidizing ball-bearing steel with vacuum treatment by ferroaluminum.
    Metallurg 10 no.12:20-22 D '65.   (MIRA 18:12)

    1. Zavod "Krasnyy Oktyabr'" i Moskovskiy institut stali i splavov.

SIVKOV, T., asistent

Materials for history of surgery in Bulgaria; old surgical
instruments. Khirurgiia, Sofia 7 no.5:317-319 1954.

1. Iz Meditsinskata akademiia I.P.Pavlov, Plovdiv, Katedra po
khirurgich. propedevtika. Zavedashch katedrata: prof. A.Chervenkov.
        (SURGERY, apparatus and instruments,
           hist. in Bulgaria)

SIVKOV, T., asistent

Data on conditions of surgery in Plovdiv first few years following
liberation. Khirurgiia, Sofia 7 no.6:380-382 1954.
(SURGERY, history,
Bulgaria)

SIVKOV, T.; NIKOLOV, N.; KIUTUKCHIEV, B.;

Temperature variations of the skin during surgery; clinico-exper-
mental investigations. Khirurgiia, Sofia 8 no.4:296-305 1955.

1. Vissh meditsinski institut I.P.Pavlov-Plovdiv propedevtichna
khirurgichna klinika. Zav.katedrata: prof. A.Chervenakov.
     (BODY TEMPERATURE,
          skin, variations during surg.)
     (SURGERY, OPERATIVE,
          perop. skin temperature variations)

EXCERPTA MEDICA Sec 18 Vol 3/4 Cardiovascular Dis. Apr 59

1133. The question of ectopia cordis (Bulgarian text) SIVKOV T. and PATEVA L. Med. Propedeut. Surg. Clin., Super. Med. Inst., 'I. P. Pavlov'. Plovdiv *Chirurgia (Sofia)* 1956, 6 (534—537)

The authors report the case of a child aged 1 month with a rare congenital anomaly - extrathoracic-abdominal ectopia cordis. From the literature available, they think that this is the 146th case of ectopia cordis and the 11th of thoracic-abdominal ectopia cordis. An unsuccessful operation was made to replace the heart under the abdominal wall.

Pantev - Plovdiv

CHERVENAKOV, A., prof.; SIVKOV, T.

On congenital harelip. Khirurgiia, Sofia 14 no.2/3:342-343 '61.

1. Propedevtichna khirurgichna klinika pri Visshiia meditsinski institut, "I. P. Pavlov", Plovdiv.

(CLEFT PALATE surg)

SIVKOV, T.

Surgical formation in absence of the anal sphincter. Khirurgiia
15 no.11:996-999 '62.

1. Iz Katedrata po propedevtika na khirurgichnite zaboliavaniia
pri VMI [Vissh meditsinski institut] "I.P. Pavlov" - Plovdiv.
(ANUS)

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I.P. Pavlov Medical Institute in Plovdiv. Khirurgiia 15
no.9/10:811-813 '62.

(BURNS)

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Treatment of traumatic and surgical defects by transplantation.
Khirurgiia 17 no.2:149-150 '64.

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1. SIVKCV, V. A.

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BELIKOV, Vasiliy Nikolayevich; NIKITIN, Aleksandr Nikitich; SIVKOV, V.I..
    inzh., retsenzent; YEVSTIGNEYEV, M.I., dotsent, retsenzent;
    GRIGORASH, K.I., red.; ROZHIN, V.P., tekhn.red.

    [Assembly of airplane engines; a manual] Sborka aviatsionnykh dviga-
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    119 p.   (MIRA 13:3)
                    (Airplanes--Engines)

SYCHEV, Aleksey Yakovlevich, professor, doktor ekonomicheskikh nauk;
DUMLER, Sergey Avgustovich, inzhener; SIVKOV, Viktor Mikhaylovich;
UMANSKAYA, M.M., inzhener, redaktor; GORELIK, I.G., kandidat
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CHEVSKIY, V.A., inzhener, redaktor; PEKELIS, I.B.; POLYAKOV, S.A.,
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SIVKOV, V. V.

"The Gamasid Ticks of Small Muridae in Khar'kov Oblast'."

Tenth Conference on Parasitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

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Give proper attention to radio communications in the shelterbelt station.   Les. i step 4, no. 4, 1952.

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ACC NR: AT7003988

AUTHOR: Korzennikov, Yu. A.; Patsevich, V. V.; Sivkov, Yu. N.   SOURCE CODE: UR/0000/66/000/000/0016/0021

ORG: Scientific Research Institute of Nuclear Physics, Electronics, and Automation, Tomsk Polytechnic Institute (Nauchno-issledovatel'skiy institut yadernoy fiziki, elektroniki i avtomatiki pri TPI)

TITLE: Design of a bar-type electrostatic generator based on direct-capacitance equations

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 16-21

TOPIC TAGS: electrostatic generator, particle acceleration, electronic test equipment

ABSTRACT: Some results of a theoretical study of a rod-type electrostatic generator with cascaded charge conveyers are set forth. The generator (see figure) comprises a number of conveyers and corresponding stator bars; its principle of operation is clear from the figure; the stator-rotor gap is very small.

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ACC NR: AT7003988
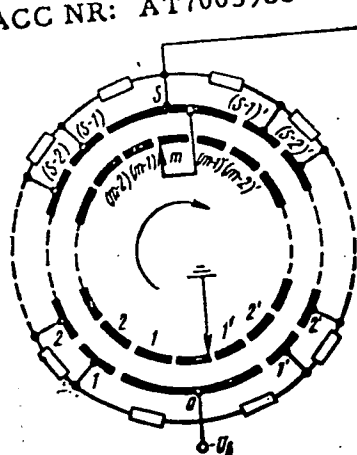
A system of electrostatic equations is set up which uses direct capacitances $C_1 C_3$ and describes generator conditions; other direct capacitances are neglected; C_1 - direct capacitance between a conveyer and its opposite stator bar, C_3 - direct capacitance between adjacent conveyers. An examination of solutions of these equations shows that: (1) The generator no-load voltage decreases and its short-circuit current increases as the coefficient $\alpha = C_3/(C_1 + 2C_3)$ increases; (2) With a greater number of conveyers, potential distribution in the generator becomes more uniform. Estimated characteristics of an 18-conveyer generator are shown. Orig. art. has: 4 figures and 9 formulas.

SUB CODE: 09 / SUBM DATE: 06Mar66

Card 2/2

ACC NR: AT7003989   SOURCE CODE: UR/0000/66/000/000/0022/0026

AUTHOR: Kalganov, A. F.; Patsevich, V. V.; Sivkov, Yu. N.

ORG: Scientific Research Institute of Nuclear Physics, Electronics, and Automation, Tomsk Polytechnic Institute (NII yadernoy fiziki, elektronikii avtomatiki pri Tomskom politekhnicheskom institute)

TITLE: Effect of conveyer capacitance to ground on the operation of bar-type electrostatic generators

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 22-26

TOPIC TAGS: electrostatic generator, particle acceleration, *electronic test equipment*

ABSTRACT: In a companion report (see Abstract AT7003988), only two direct capacitances were taken into account. However, in small-size bar-type electrostatic generators, direct capacitances of charge conveyers to ground (shaft, housing) may become considerable; they are denoted by C_4 in the inner-rotor (left) and outer-rotor (right) generator designs (see figure below). By applying the same electrostatic-equation method to two numerical examples (number of conveyers, $2m = 14$ and $2m = 22$), these conclusions are reached: (1) The inter-conveyer capacitance C_3 is responsible for a natural charge polarity reversal which augments the load current; (2) The

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L 42152-65   EPA(w)-2/EWT(m)/EWA(m)-2   Pt-7/Pab-10   IJP(c)
S/3138/64/000/251/0001/0022
ACCESSION NR: AT5006204

37
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B+1

AUTHOR: Porubay, N. I.; Sivkov, Yu. P.

TITLE: Analysis of the results of geodesic measurements on the foundation of the electromagnet of the ITEF 7-GeV accelerator /

SOURCE: USSR. Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii. Institut teoreticheskoy i eksperimental'noy fiziki. Doklady, no. 251, 1964. Analiz rezul'tatov geodezicheskikh izmereniy na fundamente elektromagnita uskoritelya ITEF na 7 Gev., 1-22

TOPIC TAGS: cyclic accelerator, particle accelerator, accelerator magnet, magnet foundation, building tolerance, foundation stiffness, particle orbit

ABSTRACT: This report is a continuation and further development of work on the analysis of the deformations of the foundations and the shifts of the electromagnet blocks of the 7-GeV accelerator of ITEF (Institute of Theoretical and Experimental Physics). The measurement procedure and the preliminary analysis were reported in PTE, No. 4, 1962, pp. 55-69. A separate analysis is made of the deformations and of the shifts in the horizontal and vertical directions. The influence of various

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ACCESSION NR: AT5006204

deformations on the deviation of the equilibrium orbit is analyzed by expansion in harmonic sums. The foundation vibration amplitudes reach 1 mm in magnitude (in vertical and radial direction) at frequencies much lower than the betatron frequency, and are commensurate with the measurement error (30 or 40 microns) for vibrations close to the betatron frequency. The radial deviation of the blocks is within 100 microns, and the vertical deviation can reach 0.5 mm. The azimuthal deformation of the foundation has a maximum of 1 mm. Some causes of the deformation are analyzed. The procedure used for the geodesic measurements is evaluated from the point of view of disclosing dangerous deformations. The deviation of the equilibrium orbit due to all the causes does not exceed 5 mm, which is considered acceptable. "The authors thank V. V. Vladimirskiy for great help rendered to the surveying group during the construction, erection, and adjustment of the accelerator, and L. L. Gol'din for interest in the work and valuable discussions." Orig. art. has: 12 figures, 10 tables, and 11 formulas.

ASSOCIATION: Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii, Institut teoreticheskoy i eksperimental'noy fiziki (State Committee on the Use of Atomic Energy, Institute of Theoretical and Experimental Physics)

Card 2/3   SUBMITTED: 5 MAY 64

L 43037-65   EWT(m)/EPA(w)-2/EWA(m)-2   Pab-10/Pt-7   IJP(c)   GS

S/0000/64/000/000/0137/0145

ACCESSION NR: AT5007917

AUTHOR: Barabash, L. Z.; Veselov, M. I.; Gol'din, L. L.; Zenkevich, P. R.;
Pligin, Yu. S.; Sivkov, Yu. P.; Talyzin, A. N.; Shegolev, V. A.

TITLE: Survey report: operation of the 7-Gev proton synchrotron of the ITEF

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy.
Moscow, Atomizdat, 1964, 137-145

TOPIC TAGS: high energy accelerator

ABSTRACT: Operation of the 7-Gev accelerator for the period from September 1962 to
May 1963 is discussed. The accelerator was run continuously from 9 a.m. Tuesday to
8 a.m. Saturday, i.e. 95 hours a week. On Saturday and Monday, preventive mainte-
nance operations are carried out on the magnet and experimental rooms and on the
accelerator itself. During the indicated period, the accelerator produced beams
for physics experiments during 32% of the operating time and was used for 21% of
the time for investigative studies on itself. Thus, the full useful time repre-
sented 53% of the calendar time. As for the physics experiments, the operations
were directed mainly on two or three targets; here, the particles were distributed
among three or four installations working independently. In the case of the

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investigations on the accelerator itself, studies were made on the various operational conditions, the form and behavior of the equilibrium orbit, the frequencies of betatron oscillations, the entrapment of particles during acceleration, the effectiveness of fast and slow targets, methods of operating on several targets, etc. At the beginning of the indicated period, the frequency of recurrence was 10 cycles a minute. In mid January it increased to 12 cycles a minute, and at the present time work is being conducted on enhancing it further. The forms of the operating magnetic cycle are discussed. The main work at present is conducted in the case of the trapezoidal form, since introduction of the flat portion sharply enhances the mean power and forces a lowering of the frequency of recurrence of cycles. Transition to the trapezoidal cycle is effected by regulation of the excitation current in the main generator. In the case of the triangular form of the cycle, the current in the magnetic blocks increases linearly for 1.57 seconds from 0 to 2.4 kiloamperes. The inverter state is held for 0.78 second. The variation of the mean (averaged over a week) current strength of the beam of accelerated particles for the indicated period is discussed. The observed beam intensity (about $1.5 \cdot 10^{10}$ particles per pulse) is determined by the main injector, which injects $(7-8) \cdot 10^{10}$ particles into the accelerator. Work is going on at present to increase the number of injected particles and also the coefficient of capture. The

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ACCESSION NR: AT5007917

kinetic energy of the protons at the end of the cycle is 7.3 Gev. 31 beam observation stations are now used. Orig. art. has 10 figures, 7 formulas, 3 tables

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki GKAE SSSR
(Institute of Theoretical and Experimental Physics, GKAE SSSR)

SUBMITTED: 26May64   ENCL: 00   SUB CODE: NP

NO REF SOV: 006   OTHER: 002

Card 3/3

L 26513-66   EWT(m)   IJP(c)   GS

SOURCE CODE: UR/0000/65/000/000/0001/0017

ACCESSION NR: AT6012260

AUTHORS: Sivkov, Yu. P.; Solnyshkov, A. I.

ORG: none

TITLE: Limitations of accelerator current, connected with limiting density of the particles in the phase volume

SOURCE: USSR. Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii. Doklady, 1965. Ogranicheniya toka v uskoritele, svyazannyye s predel'noy plotnost'yu chastits v fazovom ob"yeme,. 1-17

TOPIC TAGS: particle accelerator, focusing accelerator, high energy accelerator, phase velocity, particle distribution, particle beam

ABSTRACT: The author discusses methods of increasing accelerator current by increasing the acceptance of the accelerator (the volume in phase space) or by more uniformly filling the acceptance. The general equation of the acceptance surface is written out for linearly independent focusing with in the x and y directions and for an elliptical aperture. Conditions under which the beam introduced into the ac-

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ACCESSION NR: AT6012260

celerator is focused on points inside the acceptance are then derived. In view of the mathematical difficulties involved in interpreting the four-dimensional results, the authors consider also the simpler problem, wherein injection of the beam into the accelerator is considered as the transformation of the phase volume of the beam (emittance) into the acceptance volume with minimum loss. It is concluded that to determine the maximum oscillation amplitudes in a linearly-focusing accelerator with independent focusing with respect to x and y, it is sufficient to measure the pro- jection of the four-dimensional emittance on a given reference plane. To determine more complicated characteristics, such as the fraction of the beam which will have an oscillation amplitude below a certain specified value, or to determine the maxi- mum density in the phase volume, it is necessary to measure the distribution of the beam density in four-dimensional phase space. However, if the emittance is bounded by a certain ellipsoidal surface, measurement of the particle density in two-dimen- sional projection (cross section) of the emittance is possible. The theoretical conclusions are compared with experimental data obtained at NIIEFA on the distribu- tion of particles in the beam of a dual plasmatron injector, accelerated to approx- imately 600 keV (Pribory i tekhnika eksperimenta, in press). The variation of the phase volume of the beam as a function of the discharge current, the magnetic field in the ion source, the focusing voltage, and the particle energy were determined. The focusing voltages has practically no influence on the magnitude of the phase

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ACCESSION NR: AT6012260

volume for a given current. An increase in the discharge current and the magnetic
field in the ion source greatly increase the current. The particle density in four-
dimensional phase volume turns out to be constant, but further research is necessary
to check on this conclusion. With this in mind, estimates are presented for the
maximum number of particles that can be injected some of the accelerators now in op-
eration. The estimates show that the limitations connected with the limiting den-
sity of the particles in the phase volume are very significant for most modern ac-
celerators. Orig. art. has: 22 formulas, 3 figures, and 2 tables.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 002/ OTH REF: 006/ ꞏꞏꞏ ꞏꞏꞏ: ꞏꞏꞏ

Card 3/3 CC

L 28040-66   EWT(m)   IJP(c)

ACC NR: AP5027003   SOURCE CODE: UR/0120/65/000/005/0030/0034

AUTHOR: Ivanov, N. F.; Sivkov, Yu. P.; Solnyshkov, A. I.

ORG: Scientific Research Institute of Electrophysics Equipment of GKAE
Leningrad (Nauchno-issledovatel'skiy institut elektrofizicheskoy
apparatury GKAE)

TITLE: Measurement of phase space of the ion beam in the injector of a
linear accelerator

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1965, 30-34

TOPIC TAGS: linear accelerator, proton beam

ABSTRACT: The phase space was measured for an axisymmetric proton beam
having an energy of 500 to 600 kev and a current of the order of
hundreds of milliamperes. The distribution of the beam density in the
phase space was reproduced on photographic film. Calculations of the
beam parameters in the four-dimensional phase space was made in cylin-
drical coordinates. An equation was derived for the ellipsoidal phase
space. The measurements were conducted by using a device similar to
that described by L. E. Collins and P. T. Strout in Nucl. Instum. and
Methods, 1964, 26, 157. However, the device used by the authors was
provided with a photo-recording camera placed at 30 cm from the 0.06 mm

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UDC: 621.384.6.01